



California Geothermal Summit

Connecting Geothermal to California: A View from the CPUC

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Connecting Geothermal to California: RPS Implementation Progress

- The CPUC is moving quickly towards the first RPS solicitation by July 1st of this year
- Three important RPS-related Decisions are scheduled for Commission consideration on June 9th:
 - Establishing the standard contract terms and conditions that will govern RPS procurement
 - Setting the economic methodology for evaluating RPS bids – the Market Price Referent (MPR)
 - Determining how future transmission costs will be roughly assessed for new renewable generation – a transmission bid adder



Connecting Geothermal to California: RPS Implementation Progress

- Many pieces are in play, and California's RPS is the most complex in the country
 - **We have a lot of learning to do**
- We will “learn by doing” – which is not something government is always very good at
- But we are dealing with advanced, evolving technologies, and our thinking as public agencies must evolve as well



Connecting Geothermal to California

- The RPS development process will be competitive and technology-neutral, as the statute intended
- Geothermal may prove to be very attractive in the RPS as a base-load resource
- This presentation emphasizes some of the challenges geothermal developers will face in participating in RPS solicitations, with an emphasis on transmission issues
- **The first challenge for geothermal:** providing an electricity product that fits the utilities' generation needs at the best price



Transmission Challenges Facing the RPS

The status quo at FERC requires that generators provide up-front funding for network upgrades to transmit their power

- **Three problems arise from this:**
 - Many renewable generators cannot secure this funding
 - There may be a mismatch between the size of a generation upgrade needed to best utilize a renewable resource area, and the upgrade size needed to serve an individual generator
 - The system may not be optimized in the long run
 - Generators are refunded their transmission costs if the transmission is “used and useful” – so there is no incentive for a generator to pay for more transmission than it needs

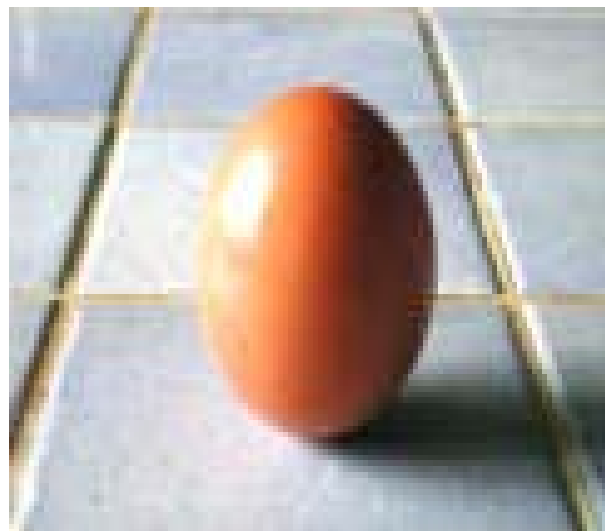


Who Pays for Transmission in the RPS?

- This creates a classic endogeneity problem, which can be expressed as follows:



or



- We need winning projects to justify transmission expansion, but projects may not win without transmission installed to serve them



RPS Legislation on Transmission Development

- Pub.Util.Code 399.25 attempts to solve this problem by giving the CPUC new authority to direct utilities to pay for transmission upgrades
 - “Transmission facilities shall be deemed to be necessary to the provision of electric service...if the Commission finds the new facility is necessary to facilitate achievement of the renewable power goals.”
- If these utility-funded transmission upgrades are not ultimately approved for rate recovery by FERC, 399.25 directs the Commission to put these costs directly into retail rates



CPUC Interpretation of RPS Transmission Rules

- The Commission first spoke to implementation of Pub.Util.Code 399.25 in July of 2003 (D.03-07-033):
 - If a transmission facility is needed to deliver power from a winning RPS bid, this provides a “prima facie finding that the network upgrade will facilitate achievement of the renewable power goals”
 - Proponents of the transmission project would then file at the Commission for a CPCN or Permit to Construct
 - If the Commission finds the transmission project both necessary and beneficial to the total network, it is *potentially* eligible for utility funding
 - **Key issue:** “Under this scenario, ratepayers assume the financial risk of the generation project coming on line.”



CPUC Interpretation of RPS Transmission (cont.)

- Code section 399.25 is therefore central to the Commission's ability to affirmatively plan for transmission to meet renewable energy goals
- The Commission ruled in the July 2003 decision, however, that in order to utilize 399.25, there must be an application to construct transmission before it:
 - "If there is no application before the Commission, 399.25 does not apply"
- How, then, do these applications come before the Commission?
 - An RPS bid is won – the endogeneity problem again
 - Some other mechanism



CPUC Interpretation of RPS Transmission (cont.)

- **The Other Mechanism:** In D.03-07-033, the Commission rejected a proposal that all of the potential renewable resources identified by the CEC be considered in a CPCN process and made eligible for utility-funded transmission

- *However*, the Commission left open the possibility that its own RPS transmission assessment, in conjunction with the CEC study, could be the basis for certain steps toward transmission expansion:
 - “Such steps could include assessments of major environmental issues, land acquisition needs (and preliminary costs), among others. We will consider the report findings on these issues and direct the utilities to take such steps, as appropriate.”



CPUC Interpretation of RPS Transmission (cont.)

- While the Commission has expressed caution:
 - “In general, we believe that the public interest is best served by waiting until we know which projects actually win the bid...before making determinations” under 399.25,
- The Commission has left open the possibility that important resource areas that must be tapped in order to meet the RPS goals may receive special policy consideration, including shifting the transmission funding burden to ratepayers and away from developers



CPUC Interpretation of RPS Transmission (concluded)

- The first opportunity to develop these new methods is likely to be in the Tehachapi wind resource area
- A Proposed Decision on May 10th (I.00-11-001) directs Southern California Edison to lead a study group to develop a multi-level plan for transmission, with the objective of ultimately accessing the several thousand MWs of wind in the area. The Decision may vote as early as next week
- The Commission is now closely engaged on the Tehachapi issue, and more policy guidance may emerge as the final Proposed Decision is prepared
- Ultimately, the first RPS solicitation will provide insight into how much these special provisions will be needed